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<b>CERTIFICATE OF TRANSMISSION BY FACSIMILE (37 CFR 1.8)</b>	
Applicant(s): <b>FIKRET M. ZABTCIOGLU</b>	

Docket No.  
**ZABF 104**

Application No. <b>10/804,648</b>	Filing Date <b>MARCH 19, 2004</b>	Examiner N/A	Group Art Unit <b>2652</b>
Invention: <b>HIGH RELIABILITY PARALLEL DATA TRANSFER HARD DISK DRIVE</b>			

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1 impact shock occurs to the desktop or to the notebook as the system is running-and this  
2 causes the head to ding as it is called in the field, to the hard disk surface, or sudden power  
3 failures result in head crash, or damage to heads or to surface. Nevertheless, it is desirable to  
4 have a fly height as close to the recording media as possible.

5 The low fly height and increased recording density can be understood from the  
6 following first equation that expresses the dependence of the length of a pulse width PW50  
7 obtained from a recording transition on the recording system.

8  $PW50 = \{g^2 + 4(d+a)(d+a+\Delta)\}^{1/2}$  (1)

9 where

10 g = gap length of the recording head

11 d = the distance separating the head and media

12 a =  $2M_r\Delta/H_c$  (length of a recording transition)

13  $\Delta$  = film thickness